AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0001] as follows:

~~1.~~ Technical **Field ~~of the Invention~~**

[0001] ~~The present invention relates to a~~ A method for forming a floating gate in a flash memory device ~~and, more specifically, to a method for forming a floating gate~~ is disclosed capable of preventing a thickness of a buffer oxide film from being increased due to a first polysilicon film in a subsequent wall oxidation process, and which is capable of minimizing an attack ~~applied to~~ of the first polysilicon film during ~~in~~ a pad nitride film strip process.

Please amend paragraphs [0003] – [0010] as follows:

SUMMARY OF THE ~~INVENTION~~ DISCLOSURE

[0003] Accordingly, ~~the present invention is directed to~~ a method for a floating gate in a flash memory device is disclosed which is capable of preventing a thickness of a buffer oxide film from being increased due to a first polysilicon film in a subsequent wall oxidation process according to a deposition of the buffer oxide film and which is capable of minimizing an attack ~~applied to~~ of the first polysilicon film ~~in~~ during a pad nitride film strip process.

[0004] One ~~aspect of the present invention is to provide a~~ disclosed method for forming a floating gate in a flash memory device, ~~comprising the steps of~~ comprises: (a) providing a semiconductor substrate on which a tunnel oxide film and a first polysilicon film are formed; (b) forming a buffer oxide film and a pad nitride film on the first polysilicon film sequentially; (c) forming a trench in the semiconductor substrate; (d) depositing a device isolation oxide film to bury the trench, and then performing a planarization process using the pad nitride film as a barrier; (e) carrying out a strip process to remove the pad nitride film and at least 50% of the buffer oxide film, at the same time; (f) removing the buffer oxide film

using a pre-treatment cleaning process; (g) and depositing a second polysilicon film on a whole structure and patterning the second polysilicon film through a patterning process, whereby forming a floating gate including the first polysilicon film and the second polysilicon film.

[0005] In the aforementioned of a method for forming a floating gate in a flash memory device according to another embodiment ~~of the present invention~~, the buffer oxide film is deposited with a thickness in the range of 30 Å to 40Å.

[0006] In the aforementioned of a method for forming a floating gate in a flash memory device according to another embodiment ~~of the present invention~~, the buffer oxide film is deposited using high temperature oxide (HTO), tetra ethyl ortho silicate (TEOS), and DCS-HTO (DiChloroSilane (SiH_2Cl_2)-HTO).

[0007] In the aforementioned of a method for forming a floating gate in a flash memory device according to another embodiment ~~of the present invention~~, after the step (c), further comprising a step of performing a wall oxidation process for forming a wall oxide film on an inner surface of the trench and on inside walls of the tunnel oxide film, the first polysilicon film, and the buffer oxide film.

[0008] In the aforementioned of a method for forming a floating gate in a flash memory device according to another embodiment ~~of the present invention~~, the wall oxidation process is carried out at a temperature in the range of 800°C to 1000°C.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] The above and other ~~objects,~~ advantages and features ~~of the present invention~~ will become apparent from the following description of preferred embodiments given in conjunction with accompanying drawings, ~~in which~~ wherein:

[0010] Figs. 1 to 9 are cross-sectional views illustrating a disclosed method for forming a floating gate in a flash memory device ~~according to a preferable embodiment of the present invention~~.

Please amend paragraphs [0012] – [0013] as follows:

[0012] Fig. 11 is a TEM photograph showing a profile formed using a disclosed method of depositing a buffer oxide film ~~according to a preferable embodiment of the present invention~~.

[0013] Fig. 12 is a TEM photograph showing profiles of a first polysilicon film and a second polysilicon film formed according to a disclosed ~~preferable~~ embodiment ~~of the present invention~~.

Please amend paragraphs [0015] – [0016] as follows:

DETAILED DESCRIPTION OF THE PRESENTLY PREFERRED EMBODIMENTS

[0015] Now, ~~preferable~~ preferred embodiments ~~according to the present invention~~ will be described in detail with reference to the appended drawings. However, ~~the present invention~~ this disclosure is not limited to the embodiments disclosed in the following description, but ~~can be implemented into~~ various changes and modifications will be apparent to those skilled in the art. ~~Thus, these embodiments according to the present invention intended to completely inform those skilled in the art of a scope of the present invention.~~

~~[0016]~~ Figs. 1 to 9 are cross-sectional views illustrating a method of forming a floating gate of a flash memory device according to ~~a preferable~~ one embodiment. ~~of the present invention. The same component as shown in Figs. 1 to 9 is referred to the same numeral.~~

Please delete paragraph [0028] from the specification

~~[0028] Technical spirit of the present invention is significantly described using preferable embodiments described above. However, it is noted that scope of the present invention is not limited to the embodiments. The embodiments will be provided for more complete explanation of the present invention to those skilled in the art. Furthermore, it is understood that improvements and modifications can be made by those who skilled in the art without departing from the spirit of the present invention.~~

Please amend paragraphs [0029] – [0033] as follows:

[0029] As described above, ~~according to the present invention~~, it is possible to prevent the first polysilicon film from being additionally oxidized by forming the buffer oxide film to minimize a thickness between the first polysilicon film and the pad nitride film, whereby the buffer oxide film is uniformly removed, and to prevent the first polysilicon film from attack of solution H_3PO_4 used in the strip process of the pad nitride film. As a result, it is possible to improve characteristics of the semiconductor element.

[0030] Furthermore, ~~according to the present invention~~, it is possible to prevent the tunnel oxide film, which is an underlying layer, from being deteriorated by directly not contacting the first polysilicon film and the pad nitride film to relieve stress caused due to contacts between these films.

[0031] Furthermore, ~~according to the present invention~~, it is possible to improve characteristics of a dielectric film formed using subsequent processes by smoothing a surface roughness of the final floating gate after the second polysilicon film is deposited using the aforementioned processes.

[0032] Furthermore, ~~according to the present invention~~, it is possible to make a slowness profile by removing great portions of side walls and corners of the HDP oxide film when the buffer oxide film is removed using the pre-treatment cleaning process prior to depositing the second polysilicon film, so as to slowly slope projections of the HDP oxide film.

[0033] Furthermore, ~~according to the present invention~~, it is possible to prevent a gate oxide film from being thin, that is, to solve a problem that a thickness of trench corners deposited by a wall oxidation process is smaller than that to be desired. in addition, since active area is ensured as much as a critical dimension, it is possible to ensure reliability of elements by improving electrical characteristics such as retention fail and rapid eliminating operation of elements.